| SHIDA, HIROKI   Patricial   |       |           |                          |                 |                 |              |  |        |                |                |          | 10/668,233    |          |          |            |          |       |        |                 |          |          |                 | ISHIDA, HIROKI |          |          |          |   |  |  |  |
|---|-------|-----------|--------------------------|-----------------|-----------------|--------------|--|--------|----------------|----------------|----------|---------------|----------|----------|------------|----------|-------|--------|-----------------|----------|----------|-----------------|----------------|----------|----------|----------|---|--|--|--|
| Carl S. Miller   3747   |       |           |                          |                 |                 |              |  |        |                |                | Examiner |               |          |          |            |          |       |        |                 |          | Art Unit |                 |                |          |          |          |   |  |  |  |
| Claim   |       |           |                          |                 |                 |              |  |        |                | Carl S. Miller |          |               |          |          |            |          |       |        |                 |          | 47       |                 |                |          |          |          |   |  |  |  |
| Claim   | 1     | ,         | Rejected (Through numera |                 |                 |              |  |        |                |                |          |               | N        | on-l     | Fle        | ected    |       |        |                 | Anneal   |          |                 |                |          |          |          |   |  |  |  |
| Claim   |       |           |                          |                 |                 |              |  |        | $\dashv$       | Н              |          |               |          |          |            |          | Н     |        |                 |          | _        |                 |                |          |          |          |   |  |  |  |
| The state of th |       | =         | Allowed                  |                 | +               | ÷ Restricted |  |        |                |                |          | L             | lr       | terf     | ere        | en       | ce    |        | 0               | Objected |          |                 |                |          |          |          |   |  |  |  |
| 1   | Claim | 3         | Date                     | ;               |                 |              | CI   | aim    |                |                | Dat      | e             |          |          |            |          | Claim |        |                 | Date     |          |                 | 9              |          |          |          |   |  |  |  |
| 1   | inal  | 12/       |                          |                 |                 | 6            | inat   | iginal |                |                |          |               |          |          |            | •        | inal  | iginal |                 |          |          |                 |                |          |          |          |   |  |  |  |
| S   | u ō,  | 6         |                          |                 |                 |              |  |        |                |                |          |               |          | 1        |            |          | ш.    | •      | Ц               |          | _        | L               |                |          |          |          |   |  |  |  |
| 3     3     ≥     53     103     104     104     104     104     104     104     105     105     105     105     105     105     106     107     107     107     107     107     108     108     108     109     100     100     600     1110     1110     1110     1111     1111     1111     1111     1111     1111     1111     1111     1111     1111     1111     1111     1111     1111     1111     111     111     62     1112     1113     114     117     117     117     117     117     117     117     117     117     118     118     118     118     118   |       | _         |                          |                 | $\vdash$        |              | -  |        | +              |                | +        | <u> </u>      |          |          | -          | -        |       |        | $\vdash \vdash$ | +        | +        | -               |                | -        | $\dashv$ | $\dashv$ |   |  |  |  |
| 5     6     105     106     7     107     107     107     108     108     9     108     9     109     100     100     100     100     100     100     110     110     110     110     110     110     110     110     110     110     110     111     110     111     110     111   | 3 3   |           |                          |                 |                 |              |  | 53     |                |                |          |               |          |          | 1          | t        |       | 103    |                 |          | 1        |                 |                |          |          |          |   |  |  |  |
| 6     7     568     106     107       8     58     108     108     109       9     59     109     109     109       10     60     1110     111  |       | _         |                          |                 |                 | 4            |  |        |                | $\dashv$       | _        |               | Ц        | _        | 4          |          |       |        |                 |          | $\perp$  |                 | Ш              |          | $\dashv$ | _        |   |  |  |  |
| 7     8     57     107     108     108     109     100     100     100     100     100     110     111  |       |           |                          | _               | $\vdash \vdash$ | -            | -  | 56     | +              | $\dashv$       | +        | $\vdash$      | Н        | +        | - 1        | :        |       | 105    | $\vdash$        | +        | +        | $\vdash$        | $\vdash$       | $\dashv$ | $\dashv$ | $\dashv$ |   |  |  |  |
| 9   | 7     |           |                          |                 |                 |              |  | 57     |                |                |          |               |          | $\pm$    |            |          |       | 107    |                 |          | 士        |                 |                |          |          | ╛        |   |  |  |  |
| 10  |       |           |                          |                 |                 |              | _  |        |                |                | -        |               |          |          |            |          |       |        | $\square$       |          |          |                 |                |          | $\Box$   | 4        |   |  |  |  |
| 111     61     111     112     112     112     112     112     113     114     115     116     114     115     115     115     115     116     117     117     67     117     117     117     118     68     1118     118     118     118     118     118     118     118     119     119     120     120     120     120     121     121     121     122     122     122     122     122     122     122     122     122     122     122     123     123     123     123     124     124     124     124     124     124     124     124     124     124     124     124     125     125     126     126     127     177     127   |       | $\dashv$  |                          |                 | $\vdash$        | 40           | -  |        | +              | +              | +        |               |          | +        | - "        | -        |       | 110    | $\vdash$        | +        | +        | $\vdash$        | $\vdash$       | $\dashv$ | -        | $\dashv$ | • |  |  |  |
| 13   63   113   114     14   64   114   114     15   65   115   115     16   66   116   117     18   68   118   119     20   70   120   120     21   71   121   122     23   73   122   122     23   73   123   124     24   74   124   124     25   76   126   127     28   78   128   129     29   79   129   130     30   80   130   130     31   81   131   132     32   82   132   132     33   83   133   133     34   84   134   134     34   84   134   134     35   85   135   136     36   86   136   137     38   88   138   139 <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>61</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>111</td> <td></td> <td></td> <td>士</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>   | 11    |           |                          |                 |                 |              |  | 61     |                |                |          |               |          |          |            |          |       | 111    |                 |          | 士        |                 |                |          |          |          |   |  |  |  |
| 144   64   111   114   115   115   115   116   116   116   116   116   116   117   118   119   120   122   122   122   122   122   122   122   122   122   122   122   122   122   122   122   122   122   123   123   123   123   123   123   124   124   124   124   124   124   124   124   125   126   127   127   127   127   127   127   127   127   127   127   127   127   127   127   127   127   127   128   128   129   130   131   131   131   131   131   131   131   131   133   33   33   33   33 <td></td> <td></td> <td></td> <td></td> <td><math>\sqcup</math></td> <td></td> <td></td> <td></td> <td>Ш</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>]</td> <td></td> <td></td> <td></td> <td>  -  </td> <td></td> <td><math>\perp</math></td> <td></td> <td></td> <td></td> <td><math>\Box</math></td> <td><math>\Box</math></td> <td></td>  |       |           |                          |                 | $\sqcup$        |              |  |        | Ш              |                |          |               |          |          | ]          |          |       |        | -               |          | $\perp$  |                 |                |          | $\Box$   | $\Box$   |   |  |  |  |
| 15  |       | $\dashv$  |                          | -               | $\vdash$        |              |  |        | +              |                | +        | H             |          | +        | -[]        | 4        |       |        | $\vdash$        |          | ╁        | H               | H              | $\dashv$ | -        | ᅱ        |   |  |  |  |
| 17   18   66   117   118   118   119   118   119   119   119   119   120   121   121   121   122   122   122   122   122   122   123   123   123   124   124   124   124   124   125   126   125   126   127   177   127   127   127   127   127   127   128   129   30   130   130   131   131   131   133   134   131   133 </td <td>15</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>65</td> <td></td> <td></td> <td><math>\top</math></td> <td></td> <td></td> <td><math>\top</math></td> <td>7</td> <td></td> <td></td> <td>115</td> <td></td> <td><math>\top</math></td> <td>T</td> <td> </td> <td><math>\Box</math></td> <td><math>\dashv</math></td> <td></td> <td>ᅥ</td> <td></td>  | 15    |           |                          |                 |                 |              |  | 65     |                |                | $\top$   |               |          | $\top$   | 7          |          |       | 115    |                 | $\top$   | T        |                 | $\Box$         | $\dashv$ |          | ᅥ        |   |  |  |  |
| 18   19   68   118   119     20   70   120   121   121   121   121   121   122   121   122   122   123   123   123   124   124   124   124   124   124   124   124   124   124   124   124   124   124   124   124   125   126   126   127   127   127   127   127   127   127   127   127   127   128   128   128   128   128   128   128   129   130   131   131   131   131   131   131   131   131   132   133   133   133   133   134   134   134   134   134   134   134   135   135   135   135   135   135   136   137   138   139   140   140   141   141   142   143   144   144   144   145   146   147   147   148   149   146   147   147 <td></td> <td></td> <td></td> <td></td> <td><math>\sqcup</math></td> <td></td> <td></td> <td>66</td> <td><math>\bot</math></td> <td></td> <td><math>\perp</math></td> <td></td> <td></td> <td>4</td> <td>1.</td> <td>, }</td> <td></td> <td>116</td> <td></td> <td><math>\prod</math></td> <td></td> <td></td> <td></td> <td></td> <td><math>\Box</math></td> <td><math>\Box</math></td> <td></td>   |       |           |                          |                 | $\sqcup$        |              |  | 66     | $\bot$         |                | $\perp$  |               |          | 4        | 1.         | , }      |       | 116    |                 | $\prod$  |          |                 |                |          | $\Box$   | $\Box$   |   |  |  |  |
| 19  |       | $\dashv$  |                          |                 | $\vdash$        | -            |  |        | +              | -              | +        | -             |          | +        | -          |          |       |        | $\vdash$        | +        | ┿        | ╁╌              | Н              | $\dashv$ |          | $\dashv$ |   |  |  |  |
| 120   | 19    |           |                          | -               |                 | - C          | $\vdash$   | 69     | +              |                |          |               | T        | $\dashv$ | -          | ŀ        |       | 119    |                 |          | T        | $\vdash$        | Н              |          |          | $\dashv$ |   |  |  |  |
| 22     3     72     122     123       24     73     123     124     124       25     75     125     125     125     127     127     127     127     127     127     127     128     128     128     128     128     128     129     130     130     130     130     131     131     131     131     131     131     131     132     133     133     133     133     133     134     134     134     134     134     134     134     135     135     135     135     135     135     136 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td><math>\Box</math></td><td></td><td>ιĮ</td><td></td><td></td><td></td><td><math>\bot</math></td><td>T</td><td><math>\Box</math></td><td></td><td></td><td></td><td><math>\Box</math></td><td></td></t<>  |       |           |                          |                 |                 |              |  |        | _              |                |          |               |          | $\Box$   |            | ιĮ       |       |        |                 | $\bot$   | T        | $\Box$          |                |          |          | $\Box$   |   |  |  |  |
| 23   73   123     24   124   125     25   125   125     26   76   126     27   127   127     28   128   129     30   80   129     31   81   131     32   82   132     33   83   133     34   84   134     35   85   135     36   86   135     37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   96   146     47   97   147     48   99   149   |       | 4         | -                        |                 | -               | -            | -  | 71     | +              |                | +        | $\vdash$      |          |          | - 3        | -        |       | 121    | $\vdash$        | +        | +        | ┝               | $\square$      |          | $\dashv$ | $\dashv$ |   |  |  |  |
| 24     124       25     75       26     126       27     127       28     78       29     128       30     80       31     81       32     82       33     83       34     84       35     85       36     86       37     87       38     88       39     88       40     90       40     91       44     94       44     94       45     96       46     96       49     99       49     149  |       | $\dashv$  |                          | _               |                 |              | -  |        | $\dagger$      | $\dashv$       | +        |               |          | +        | - 85<br>27 | -        |       |        |                 | +        | ╁╌       |                 | -              | -        | ┪        | ᅥ        |   |  |  |  |
| 26     76     126     127     127     127     127     127     128     128     128     128     128     128     129     129     130     130     130     130     131     131     131     131     131     131     131     132     132     132     133     133     133     133     133     133     133     134     134     134     134     134     134     135     135     135     135     135     135     135     136     136     137     137     137     137     137     137     137     138     138     138     138     138     139     140     140     140     140     140     141     141     141     141     142     142     143     143     144     144     144     144     144     144     144     144     144     144     144     144     144     144     144     145     146     146     147   |       | $\Box$    |                          |                 |                 | 2            |  |        |                |                |          |               |          |          | ]          |          |       | 124    |                 |          | 1        |                 |                |          | $\Box$   |          |   |  |  |  |
| 27     28     77     128     128       29     79     129     130     130       31     80     130     131     131       32     82     132     133     133       33     83     133     134     134       35     85     136     136     136       37     87     137     138     138       39     88     139     140     140     140       40     90     140     141     141     142     142       43     93     143     144     144     144     144     144     144     144     144     144     144     144     145     146     146     147     148     148     148     148     148     149     149     149     149     149     149     149     149     149     149     149     149     149     149     149     149     149     149     149<   |       | -         |                          |                 |                 | -            | -  |        | -              | -              | +        | $\vdash$      | $\dashv$ | -        | 4,5        | ŀ        |       | 125    | -               | -        | +        | H               | $\vdash$       |          | -        | 긕        |   |  |  |  |
| 28   78   128     29   129     30   80     31   81     32   82     33   132     34   84     35   85     36   86     37   87     38   138     39   89     40   90     41   91     42   92     43   143     44   94     44   94     44   94     45   95     146   146     47   98     48   98     49   149  |       | ᅥ         | - - - -                  | -               | $\vdash$        |              | -  |        | $\forall$      | $\dashv$       | +        |               |          | +        | ۱.         | -        |       |        |                 |          | +        |                 | $\vdash$       | $\dashv$ | $\dashv$ | $\dashv$ |   |  |  |  |
| 30  |       |           |                          |                 |                 | ]            |  | 78     |                | $\Box$         |          |               |          |          | ]          |          |       | 128    |                 |          |          |                 |                |          |          |          |   |  |  |  |
| 31   81   131     32   83   132     33   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   96   146     47   97   147     48   98   149   | 29    | $\dashv$  | <del>-   -   -  </del>   | -               | -+              | -            | $\vdash$   | 79     | $\vdash$       | -              |          | ₽             |          | -        | 4:         |          |       | 129    | H               |          |          |                 | $\dashv$       | -        | $\dashv$ | 4        |   |  |  |  |
| 32   82   132     33   83   133     34   84   134     35   85   135     36   86   136     37   87   137     38   88   138     39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   96   145     46   97   147     48   98   148     49   99   149   |       | $\dashv$  |                          | $\dashv$        | $\vdash$        | -            |  |        | $\vdash$       | $\dashv$       | +        | $\vdash$      |          | _        | +          | ŀ        |       |        | $\vdash$        | +        | ╅        | $\vdash$        | $\vdash$       | +        | +        | 1        |   |  |  |  |
| 34   84   134     35   85   135     36   86   136     37   88   136     38   88   137     39   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   98   148     49   99   149   |       |           |                          |                 |                 | ] -          |  |        |                |                |          |               |          |          | ]          | Ţ        |       |        |                 | $\perp$  |          |                 |                |          |          |          |   |  |  |  |
| 35   36   135   136     37   88   136   137     38   88   138   138     39   90   140   140     41   91   141   141     42   92   142   143     43   93   143   144     44   94   144   144     45   96   145   146     47   97   147   148     48   99   149   149   |       | $\dashv$  |                          | $\dashv$        | $\vdash$        | - 6          | -  |        | +              | +              | +        | Н             | $\dashv$ | _        | 4          | 1        |       |        | $\vdash$        | +        | ╀        | -               |                |          | $\dashv$ | $\dashv$ |   |  |  |  |
| 36   37   86   136   137     38   88   138   138     39   89   139   139     40   90   140   141     41   91   141   141     42   92   142   143     43   93   143   144     45   95   145   146     46   96   146   147     48   98   148   149  | 35    | $\dashv$  |                          |                 |                 | ٦.           | $\vdash$   |        | H              | $\dashv$       | +        | Н             |          | $\dashv$ | -          | - 1      |       |        | Н               | +        | +        | $\vdash$        | H              | ┪        | $\dashv$ | $\dashv$ |   |  |  |  |
| 38   88   138     39   90   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |       |           |                          |                 |                 |              |  |        |                |                |          |               |          | $\Box$   | ],         |          |       | 136    |                 |          |          |                 |                |          |          | ╗        |   |  |  |  |
| 39   89   139     40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   |       |           |                          |                 |                 | -  :         | -  |        | +              |                | +        | Н             |          | +        | -          | ŀ        |       |        | $\vdash$        | -        | ╁        | -               | $\vdash$       | $\dashv$ | $\dashv$ | $\dashv$ |   |  |  |  |
| 40   90   140     41   91   141     42   92   142     43   93   143     44   94   144     45   95   145     46   96   146     47   97   147     48   98   148     49   99   149   | 39    | $\dashv$  |                          | $\dashv \dashv$ | $\vdash$        | ٦.           | _  |        | ${}^{\dagger}$ |                | +-       | Н             |          | +        | 1          | ŀ        |       |        |                 | +        | +-       | $\vdash$        | $\vdash$       | $\dashv$ | $\dashv$ | $\dashv$ |   |  |  |  |
| 42 92 142   43 93 143   44 94 144   45 95 145   46 96 146   47 97 147   48 98 148   49 149  |       |           |                          |                 |                 | ]            |  |        | П              |                | Ţ        |               |          | $\perp$  |            | Ţ        |       |        |                 |          | $\perp$  |                 |                | $\Box$   | $\Box$   | $\Box$   |   |  |  |  |
| 43 93   44 94   45 95   46 96   47 97   48 98   49 148   49 149   |       | $\dashv$  |                          | $\dashv$        |                 | $\dashv$     |  |        | H              | +              | +-       | Н             |          | -        | - :"       | -        |       |        | $\vdash \vdash$ | +        | +        | Н               | $\dashv$       | $\dashv$ | $\dashv$ | $\dashv$ |   |  |  |  |
| 44 94   45 95   46 96   47 97   48 98   49 149  |       | $\exists$ |                          | $\dashv$        |                 |              |  | 93     | †              | $\dashv$       | +        | H             | $\dashv$ | +        | ۲.         | -        |       |        | $\vdash \vdash$ | +        | +        | H               | H              | $\dashv$ | $\dashv$ | $\dashv$ |   |  |  |  |
| 45 95   46 96   47 97   48 98   49 148   49 149   |       | $\Box$    |                          | $\Box$          |                 | _            |  | 94     | П              |                | $\perp$  |               |          | 丰        |            |          |       | 144    |                 |          |          |                 |                |          | _        |          |   |  |  |  |
| 47 97 147   48 98 148   49 99 149   |       | -         |                          | $\dashv$        | $\vdash$        |              | <u> </u>   |        | +-1            | $\dashv$       | +        | $\vdash$      | $\dashv$ |          | 4          | -        |       |        | $\vdash$        | +        | +        | $\vdash \vdash$ | $\dashv$       | 4        | $\dashv$ | 4        |   |  |  |  |
| 48 98 148 149 99 149 149 149 149 149 149 149 149  | 47    | +         |                          |                 | +               | "            | <del>                                     </del> |        | ╁┤             | -              | +        | $\forall$     | $\dashv$ |          | +          | <b>.</b> |       |        | $\vdash$        | +        | +        | H               | $\dashv$       | $\dashv$ | $\dashv$ | $\dashv$ |   |  |  |  |
|   | 48    |           |                          |                 | $\Box$          |              |  | 98     | $\Box$         |                |          |               |          | 丰        | ];,        |          |       | 148    |                 |          | L        |                 |                |          |          |          |   |  |  |  |
|   |       |           |                          | $\dashv$        |                 | -  -         |  |        | +-+            |                | - -      | $\vdash \mid$ |          |          | 4          | +        |       |        | -               | _        | $\vdash$ | Н               | _[             |          |          | _        |   |  |  |  |
|   |       |           |                          |                 |                 | _            | L  | 1 1001 | 11             |                |          |               | 1        | I_       |            | L        |       | 130    |                 | l_       |          | Ш               | 1              | 1        | _1       |          |   |  |  |  |

Application No.

Index of Claims

Applicant(s)